

Amendments to the Specification:RECEIVED  
CENTRAL FAX CENTER

AUG 21 2006

The paragraph starting on page 4, line 8, is amended herein and now reads as follows:

-- Output ~~lines 14~~ lines 44 lead away from the output circuit 16 of the control unit 10. Via these output lines 44, the drive unit 46 of the vehicle is controlled by means of actuating variables for power parameters. Furthermore, a connection to a braking control system 50 is provided via a connecting line 48. A deceleration command is outputted via this connection to the control unit 50a of the brake system and this control unit 50a actuates the brake system 50b of the vehicle. Such a brake control system 50 is, for example, a known electrohydraulic brake system. --

The paragraph starting on page 4, line 30, is amended herein and now reads as follows:

-- In addition, in FIG. 1, the vehicle speed limiter 22 and the adaptive vehicle speed controller 26 are shown as separate control units which include their own microcomputers for carrying out their functions. In other embodiments, the described functions are programs of the microcomputer 12. In this case, only actuating signals of the driver and measuring signals with respect to vehicle speed and distance are transmitted via the input lines; whereas, the acceleration desired values of these control systems are present internally in the

microcomputer 12. --

The paragraph starting on page 6, line 23, is amended herein and now reads as follows:

-- In the flowchart of FIG. 2, a speed limiting function 200 as well as a speed control function 202 are shown. The configurations of functions of this kind, are, for example, known from the state of the art referred to initially herein. The functions develop at least one of the above-mentioned effects and in some embodiments, several of the effects are developed (for example, the limit function can include a curve limiting, a pressure loss limiting and a limiting pregiven by the driver). In correspondence to the above-mentioned state of the art, the particular functions form actuating quantities  $aV_{Limdes}$  and/or  $aV_{Regdes}$  which the functions output for further processing. In the preferred embodiment, these quantities are desired values for the acceleration and/or deceleration of the vehicle. In other embodiments, these desired quantities are desired torque quantities, et cetera. The actuating quantities are transmitted to mixers (204, 206), respectively, assigned to the respective function. The mixer (LIM) 204 is responsible for the speed limiting function and the mixer (REG) 206 is responsible for the speed control function. The mixers have the task to limit the corresponding desired value (acceleration command). This takes place in dependence upon the base values  $aBase$  formed in 208. The formation of these values is described below in detail as is the operation of the mixer. The

result of the limiting by the mixers ~~[[are,]]~~ is, possibly, limited desired values. In the case of the speed limiting function, these desired values are designated as  $aV_{Limmix}$  as output quantities of the mixer 204 and, in the case of the speed control function, these desired values are identified as  $aV_{Regmix}$  as output quantities of the mixer 206. These desired values, which are limited as may be required, are then coordinated in a distributor 210. The distributor makes a selection from these supplied acceleration command values and forms one or several propulsion desired values des which ~~[[is]]~~ is/are outputted to the corresponding control functions for motor, brake and/or transmission. A preferred embodiment of one such distributor is shown in FIG. 6. --

The paragraph starting on page 9, line 3, is amended herein and now reads as follows:

-- In a preferred embodiment, the base values are determined as follows. If, as a condition precedent, a speed control function is active,  ~~$aBaseMax$~~   $aBaseMax$  is computed on the basis of the old acceleration desired value  $aV_{Regmix}(n-1)$  and the instantaneous vehicle actual acceleration  $aBaseAct$ . As a rule,  $aBaseMax$  corresponds to the desired value with a positive gradient of the desired value and corresponds to the actual acceleration value with a negative gradient. Here, it is to be noted that  $aBaseMax$  does not exceed the instantaneous acceleration value by more than an applicable value (for example, -0.7 m/sec). In this way, it is prevented that  $aBaseMax$  moves too far from the actual value by

being tied to the old desired value. --

The paragraph starting on page 11, line 18, is amended herein and now reads as follows:

-- FIG. 6 shows a flowchart which sketches a preferred realization of the distributor 210 while considering the driver command MFW. Input quantities are the driver command torque MFW in addition to the desired values ~~aVRegMix~~ aVRegMix and aVLimMix. The driver command torque MFW is determined from the accelerator pedal value. The output quantity MPT is the resulting command for propulsion torque from the driver functions and the driver command. The quantity aBr identifies the resulting desired deceleration which results from the drive functions. The binary data B\_BrEn represents the validity of aBr. In 2101 and 2102, the acceleration desired values aVRegMix and aVLimMix are converted into corresponding transmission output torques with the aid of the drive dynamic equation. The driver command torque MFW and the desired value, which is derived from the desired acceleration value aVRegMix of the controller, are supplied to a maximum value selector 2103. The larger of the two values is selected in the maximum value selector. In this way, an override of the drive speed controller by the driver command is possible. --